abcam

ab184186

Anti-AGPS antibody [EPR13120] - N-terminal

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR13120
Purity	Tissue culture supernatant

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat

Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information AGPS

Function Catalyzes the exchange of the acyl chain in acyl-dihydroxyacetonephosphate (acyl-DHAP) for a long chain fatty alcohol, yielding the first ether linked intermediate,

i.e. alkyl-dihydroxyacetonephosphate (alkyl-DHAP), in the pathway of ether lipid biosynthesis.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	AGPS also known as alkylglycerone phosphate synthase represents an important enzyme in lipid metabolism with a molecular mass of approximately 73 kDa. It catalyzes the formation of alkylglycerone phosphate from dihydroxyacetone phosphate and fatty alcohols a reaction that occurs in peroxisomes. AGPS is expressed in various tissues with high levels observed in the brain heart and reproductive organs. Its expression is important for proper plasmalogen synthesis an essential lipid component of cell membranes.

Biological function summary	AGPS functions as an important component in the synthesis of ether lipids specifically plasmalogens which play a role in membrane structure and signaling. Plasmalogens are phospholipids that are part of cellular membranes and influence membrane fluidity and dynamics. AGPS operates as a sole enzyme in the initial step of de novo plasmalogen biosynthesis engaging with other enzymes to complete this lipid complex. Its activity ensures the proper formation of plasmalogens which are particularly abundant in the heart and nervous tissues.
Pathways	AGPS plays a central role in the ether lipid biosynthesis pathway and interacts with proteins involved in lipid metabolism. Plasmalogen biosynthesis is a critical pathway where AGPS catalyzes the first step acting as a precursor in the synthesis of several ether lipids. Within the biosynthetic pathway AGPS works alongside enzymes such as fatty acyl-CoA reductase highlighting its collaboration with other proteins to regulate lipid homeostasis in cellular membranes.
Associated diseases and disorders	Defects in AGPS can relate to conditions such as rhizomelic chondrodysplasia punctata (RCDP) and Zellweger spectrum disorders. RCDP presents severe skeletal malformations among other symptoms while Zellweger disorders involve multiple organ dysfunctions due to peroxisomal biogenesis issues. Mutations in AGPS often result in developmental delays and neurological impairment. Additionally AGPS dysfunction affects proteins like PEX7 which is important for targeting peroxisomal enzymes further exacerbating the disease phenotypes associated with these conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

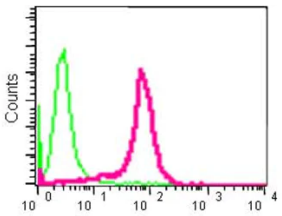
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

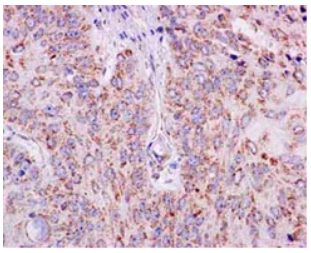
5 product images



Flow Cytometry (Intracellular) - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186)

AGPS Flow Cytometry (Intracellular) staining using rabbit Anti-AGPS antibody

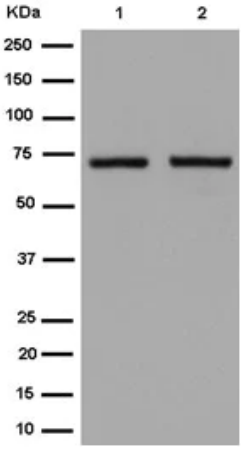
Intracellular flow cytometric analysis of 2% paraformaldehyde fixed HeLa cells labeling AGPS with ab184186 at 1/10 dilution (red), compared to a rabbit IgG negative control (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186)

AGPS Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AGPS antibody

Immunohistochemical analysis of paraffin-embedded Human cervical carcinoma tissue labeling AGPS with ab184186 at a 1/100 dilution.
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Western blot - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186)

AGPS Western blot staining using rabbit Anti-AGPS antibody

All lanes:
Western blot - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186) at 1/10000 dilution

Lane 1:
HeLa cell lysate at 20 µg

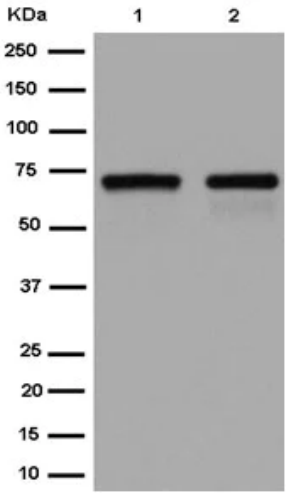
Lane 2:
SW480 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 73 kDa



Western blot - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186)

AGPS Western blot staining using rabbit Anti-AGPS antibody

All lanes:
Western blot - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186) at 1/2000 dilution

Lane 1:
K562 cell lysate at 20 µg

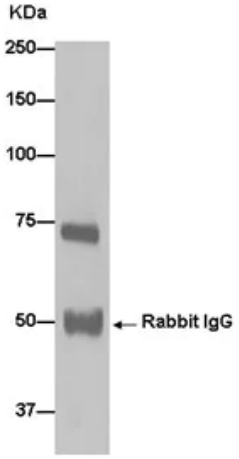
Lane 2:
HepG2 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 73 kDa



Western blot - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186)

AGPS Western blot staining using rabbit Anti-AGPS antibody

Western blot analysis on immunoprecipitation pellet from HeLa cell lysate labeling AGPS with ab184186 at a 1/50 dilution. Secondary antibody Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at a 1/1000 diluiton.

All lanes:
Western blot - Anti-AGPS antibody [EPR13120] - N-terminal (ab184186)

Predicted band size: 73 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.